

FIGURE 3

Base, Payload, and Connecting Structure and Methods of Making the Same
CALVET ET AL.
DOCKET NO. M-12486 US

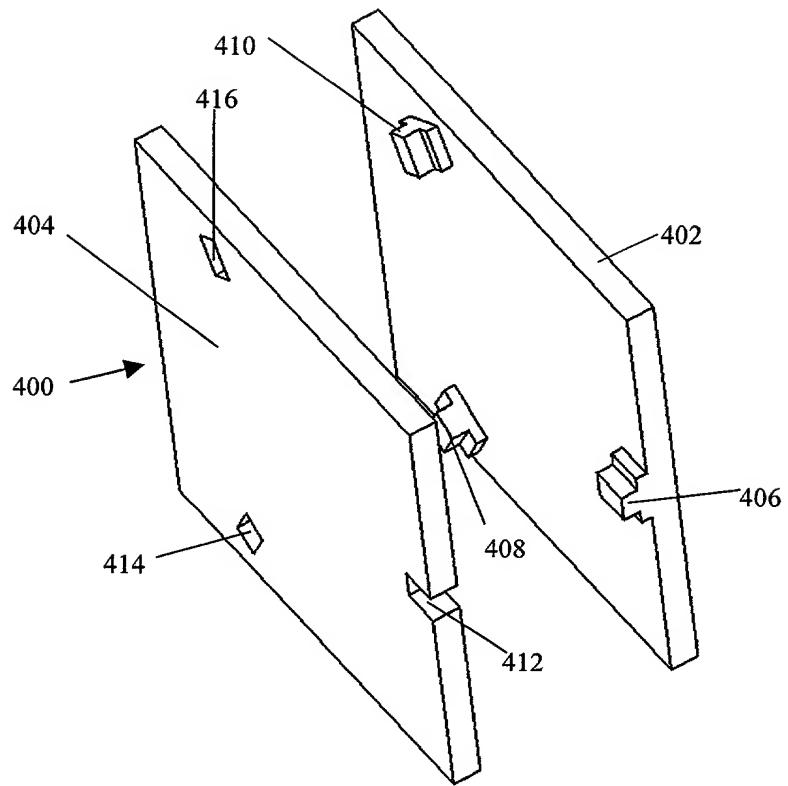


FIGURE 4

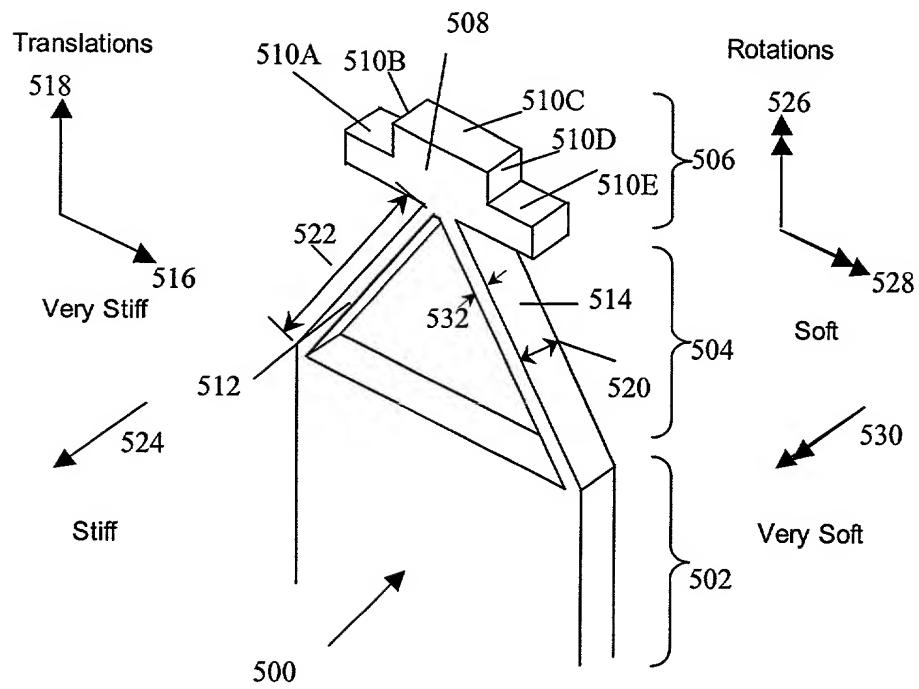


FIGURE 5

Base, Payload, and Connecting Structure and Methods of Making the Same
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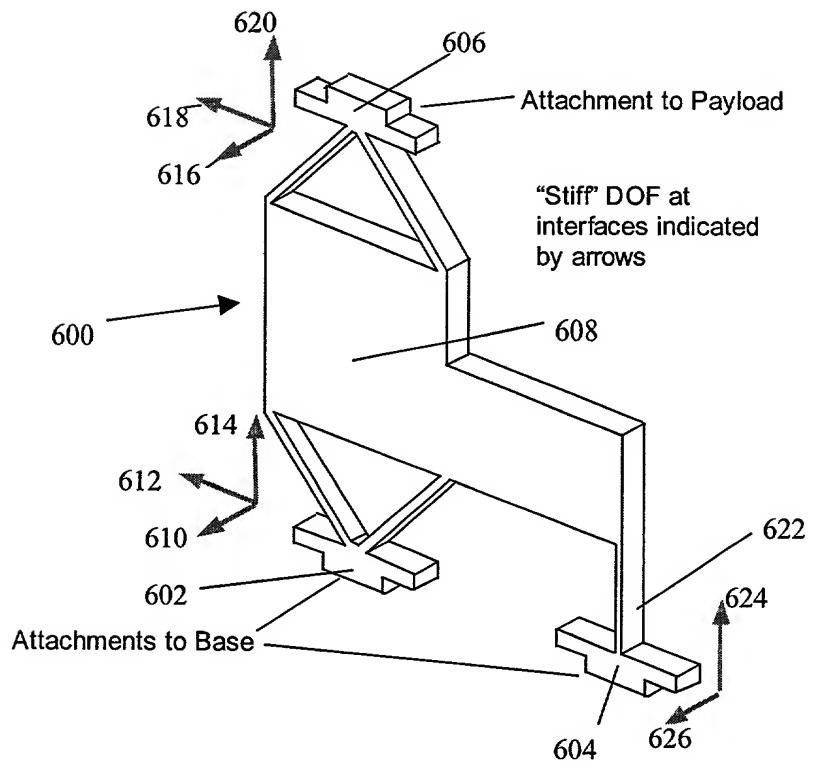


FIGURE 6

Base, Payload, and Connecting Structure and Methods of Making the Same
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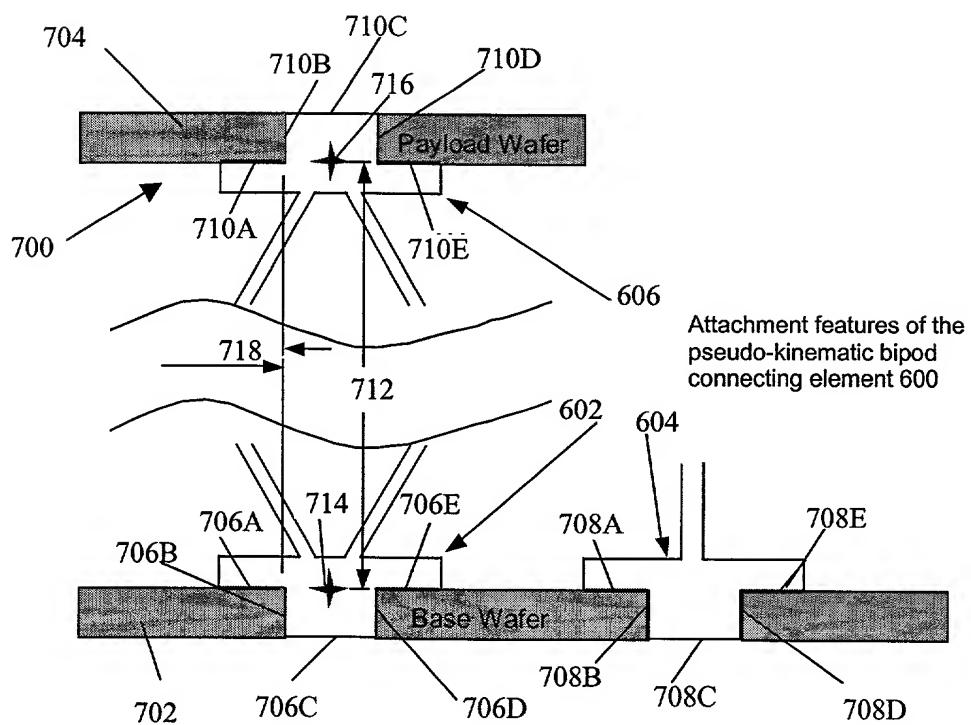


FIGURE 7

Base, Payload, and Connecting Structure and Methods of Making the Same
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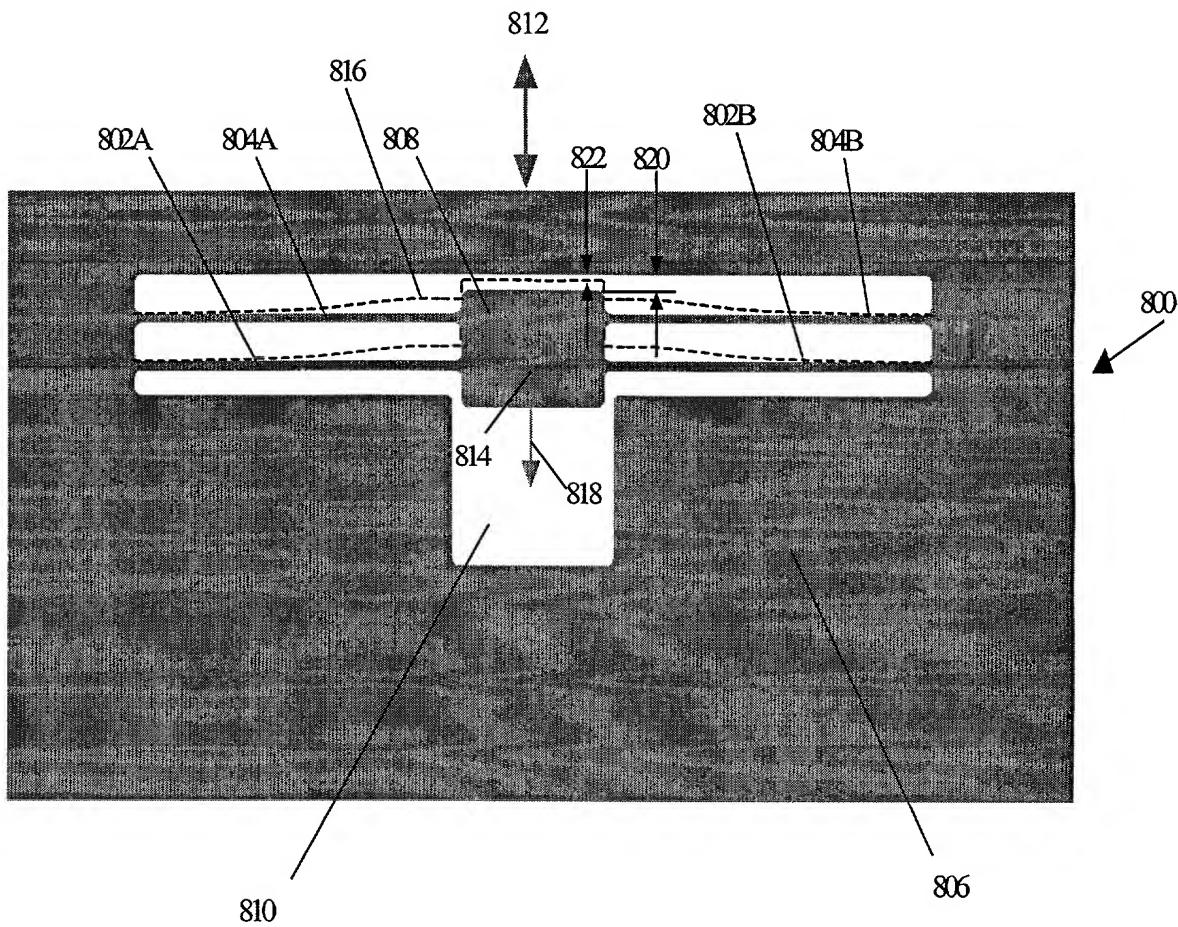


FIGURE 8

Base, Payload, and Connecting Structure and Methods of Making the Same
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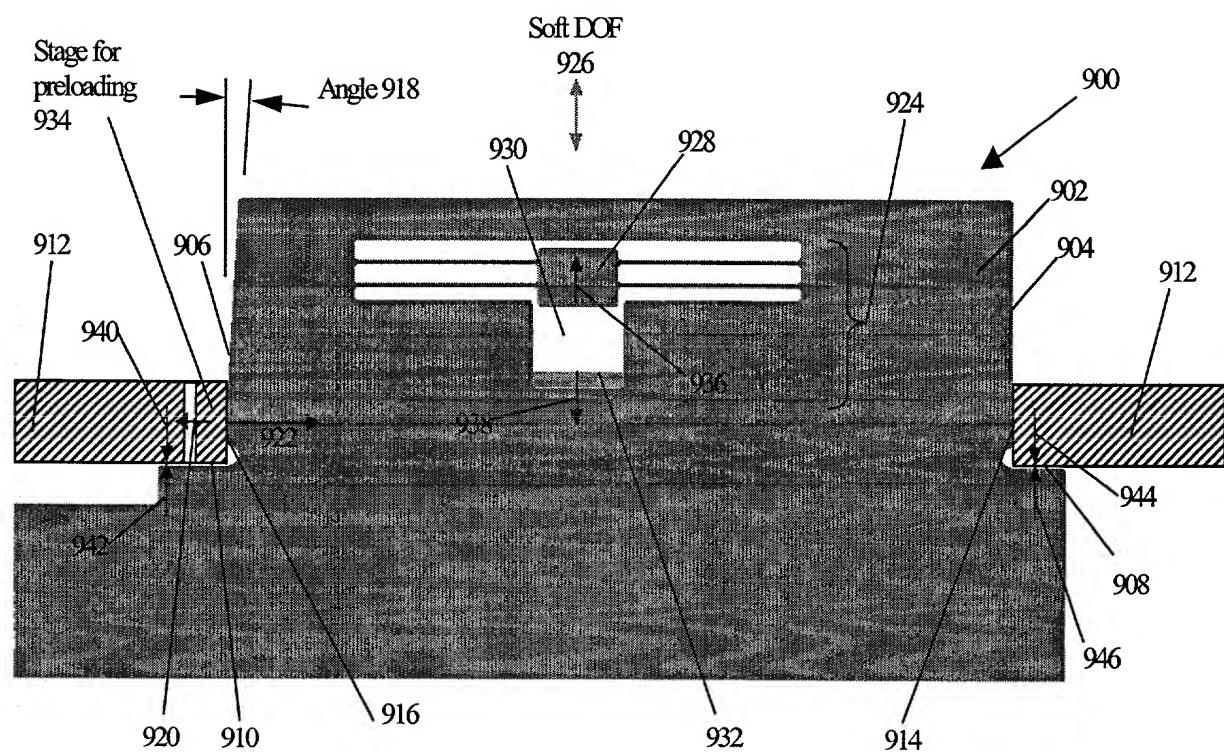


FIGURE 9

Base, Payload, and Connecting Structure and Methods of Making the Same
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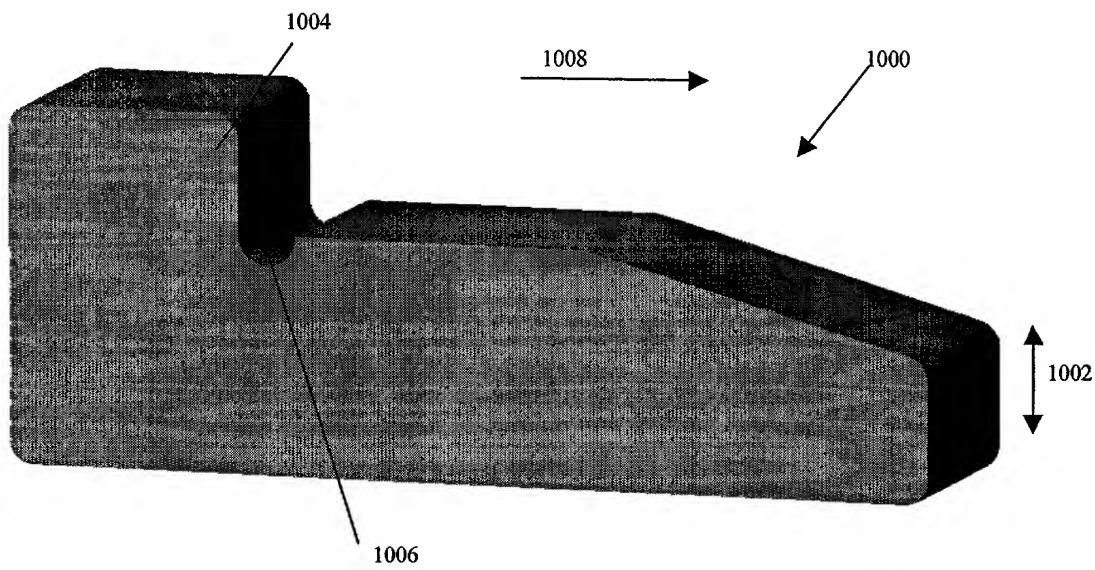


FIGURE 10

Base, Payload, and Connecting Structure and Methods of Making the Same
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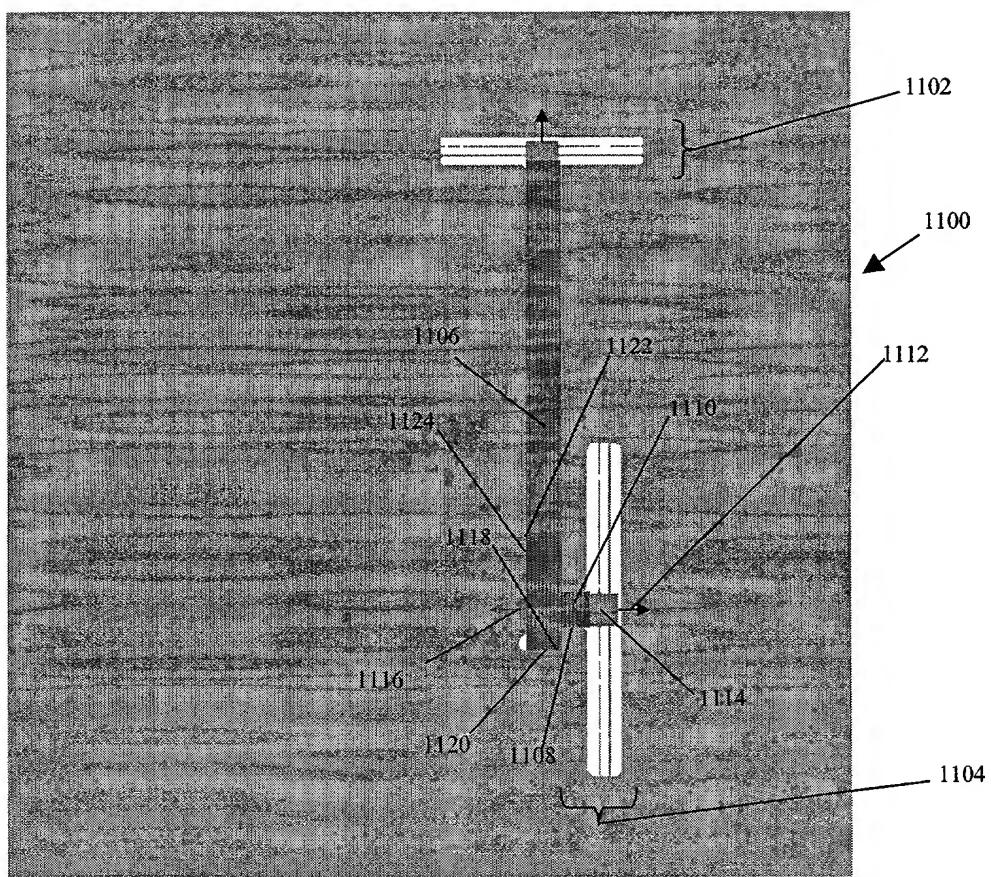


FIGURE 11

FIGURE 12A

Redundant Connecting Element 1206
2 DOF position control each
4-5 DOF stiffness each

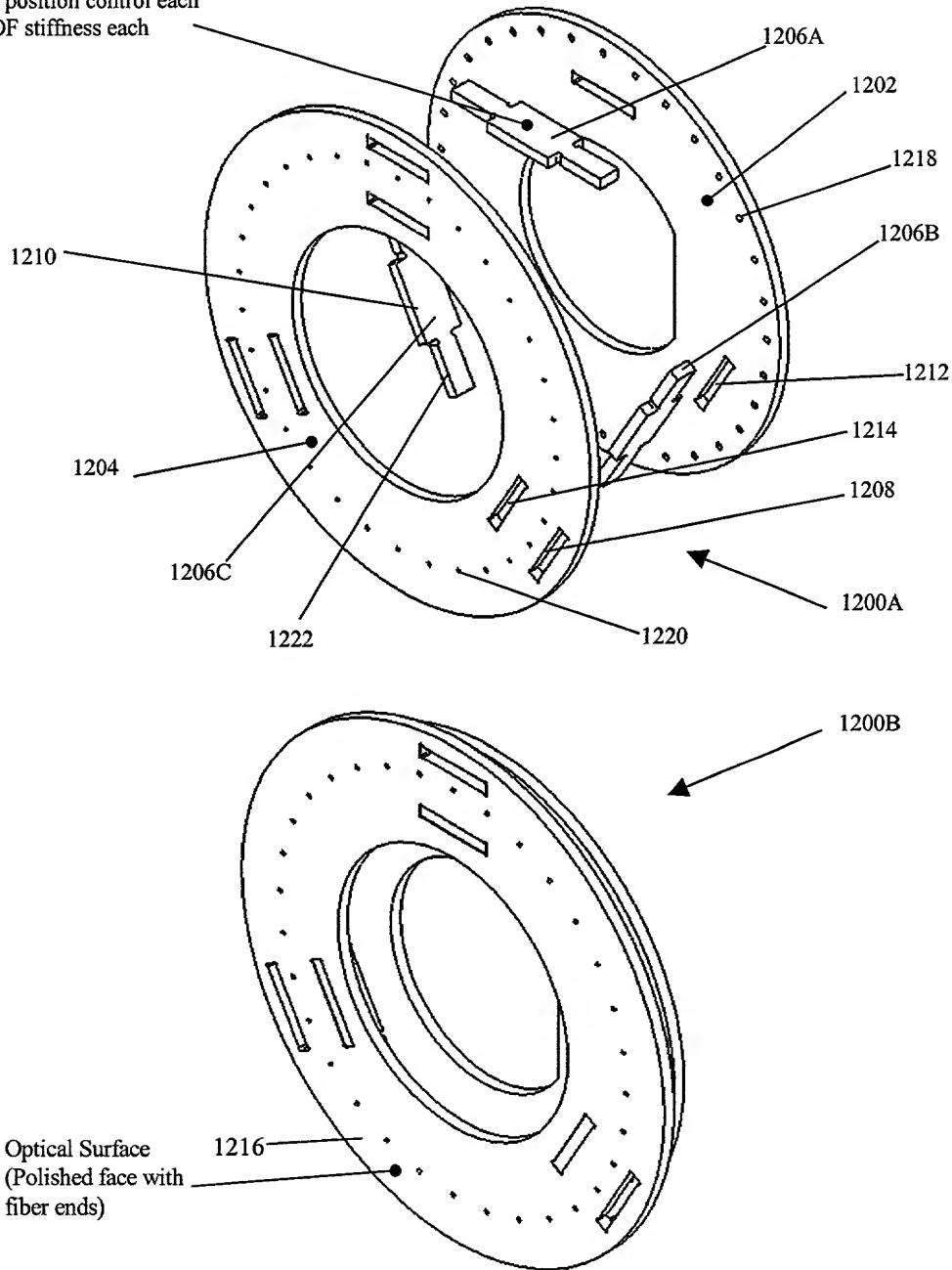


FIGURE 12B

Base, Payload, and Connecting Structure and Methods of Making the Same
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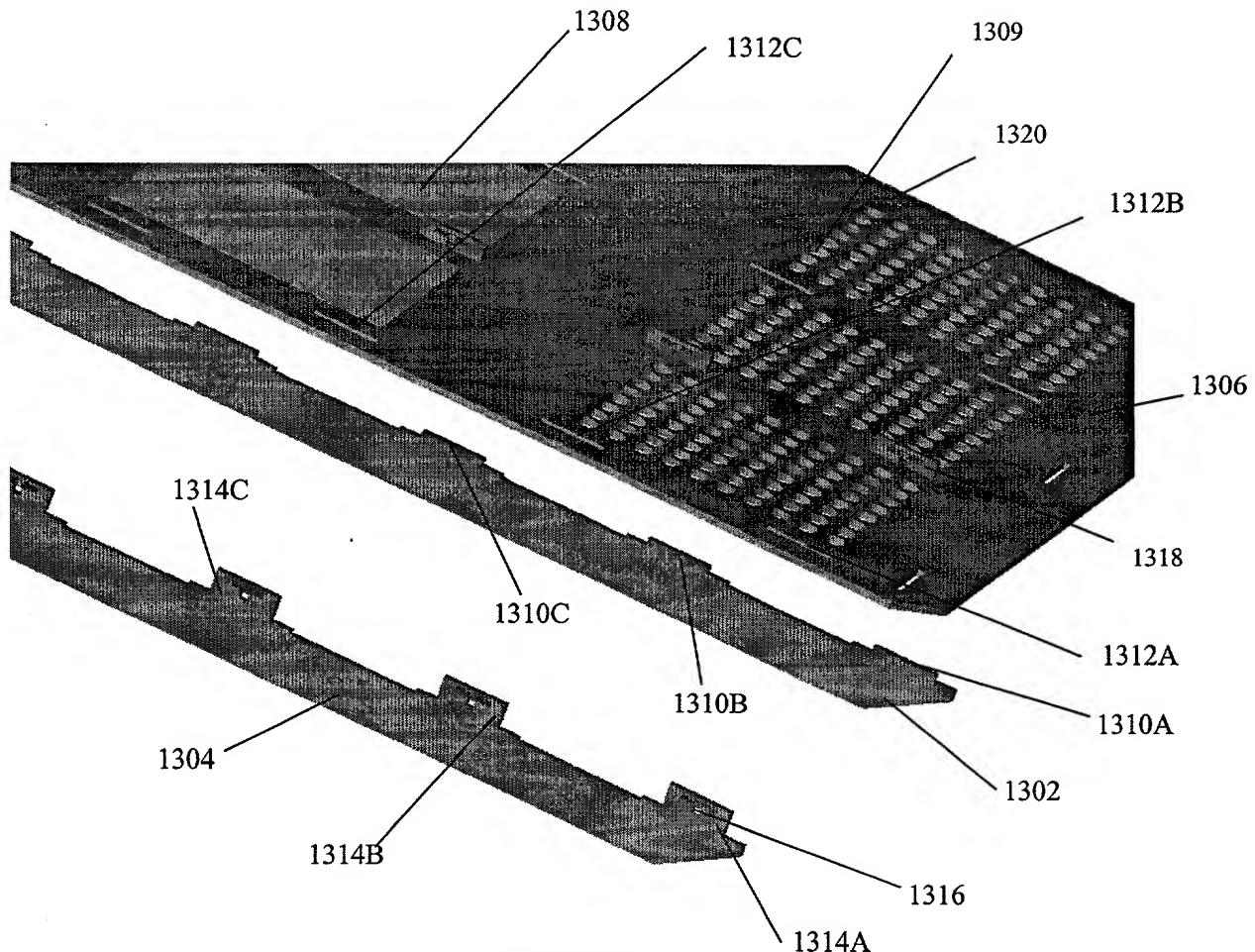


FIGURE 13

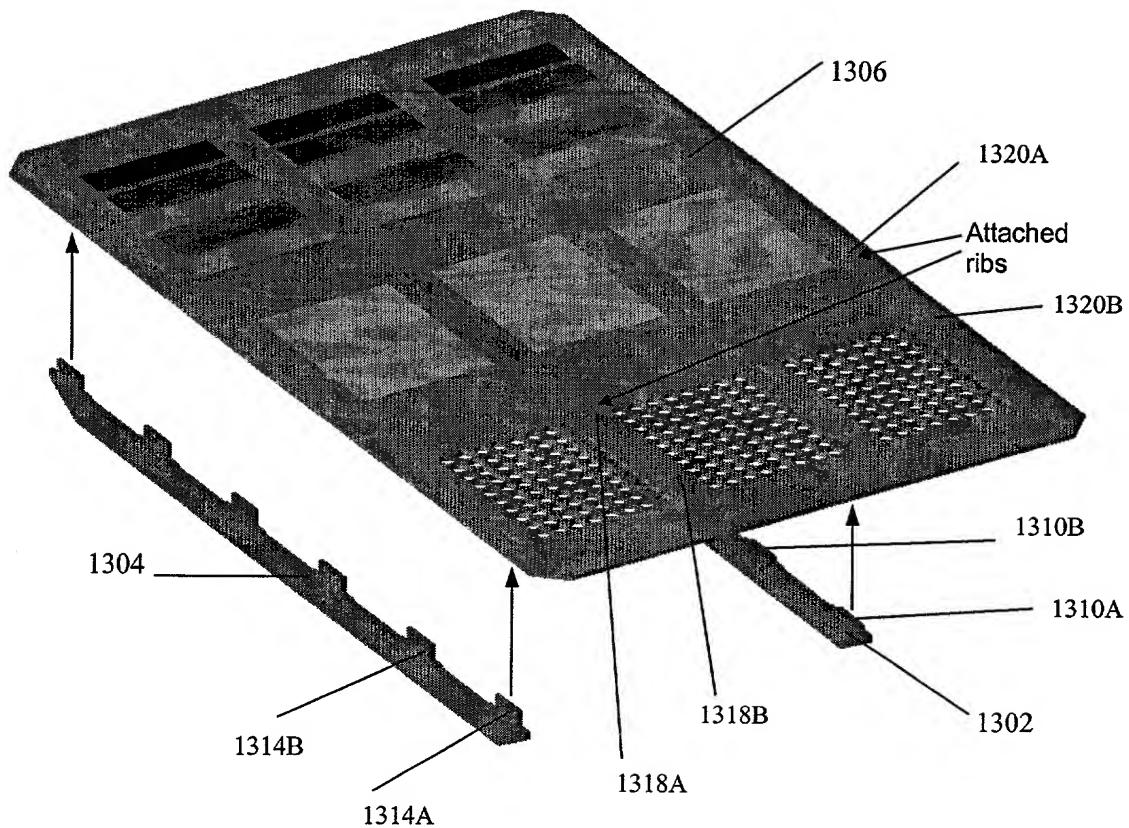


FIGURE 14

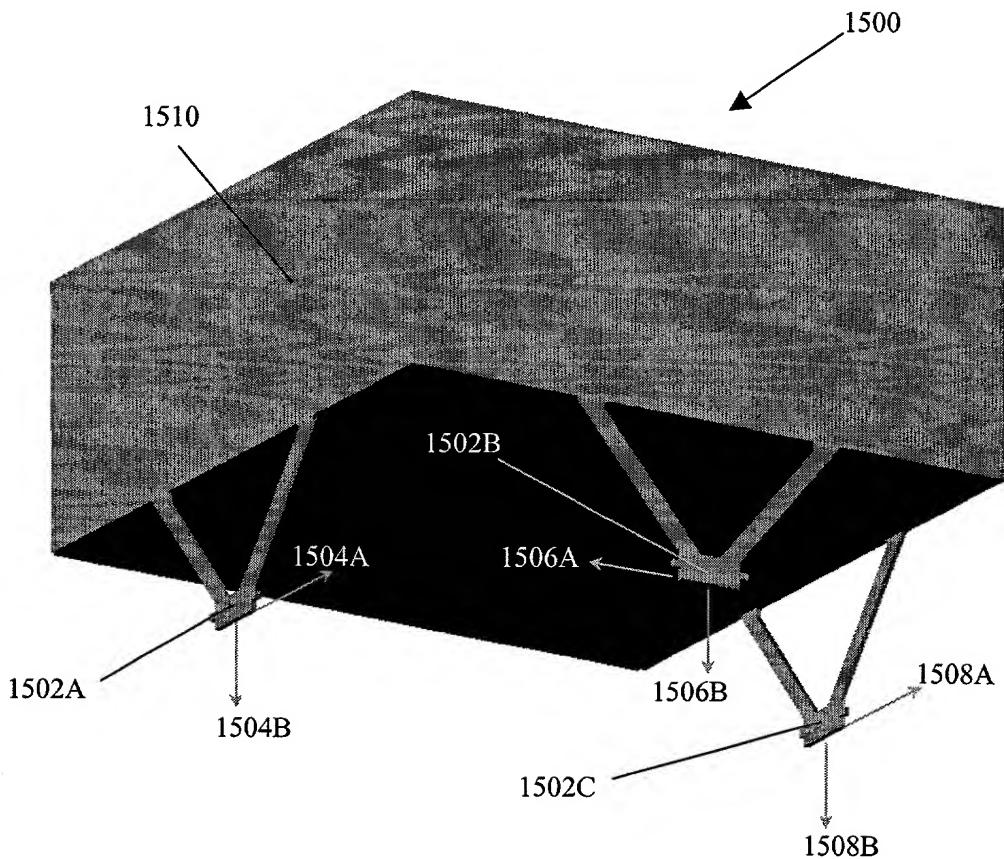


FIGURE 15

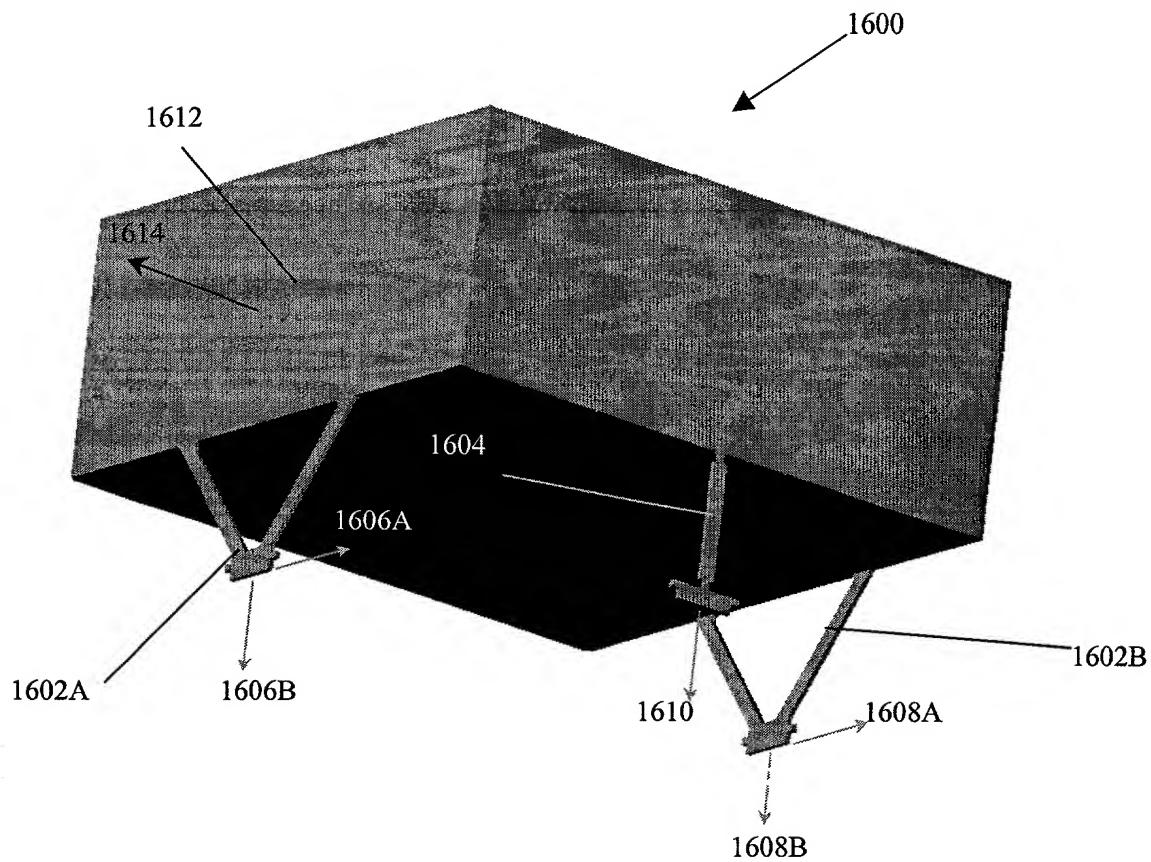


FIGURE 16

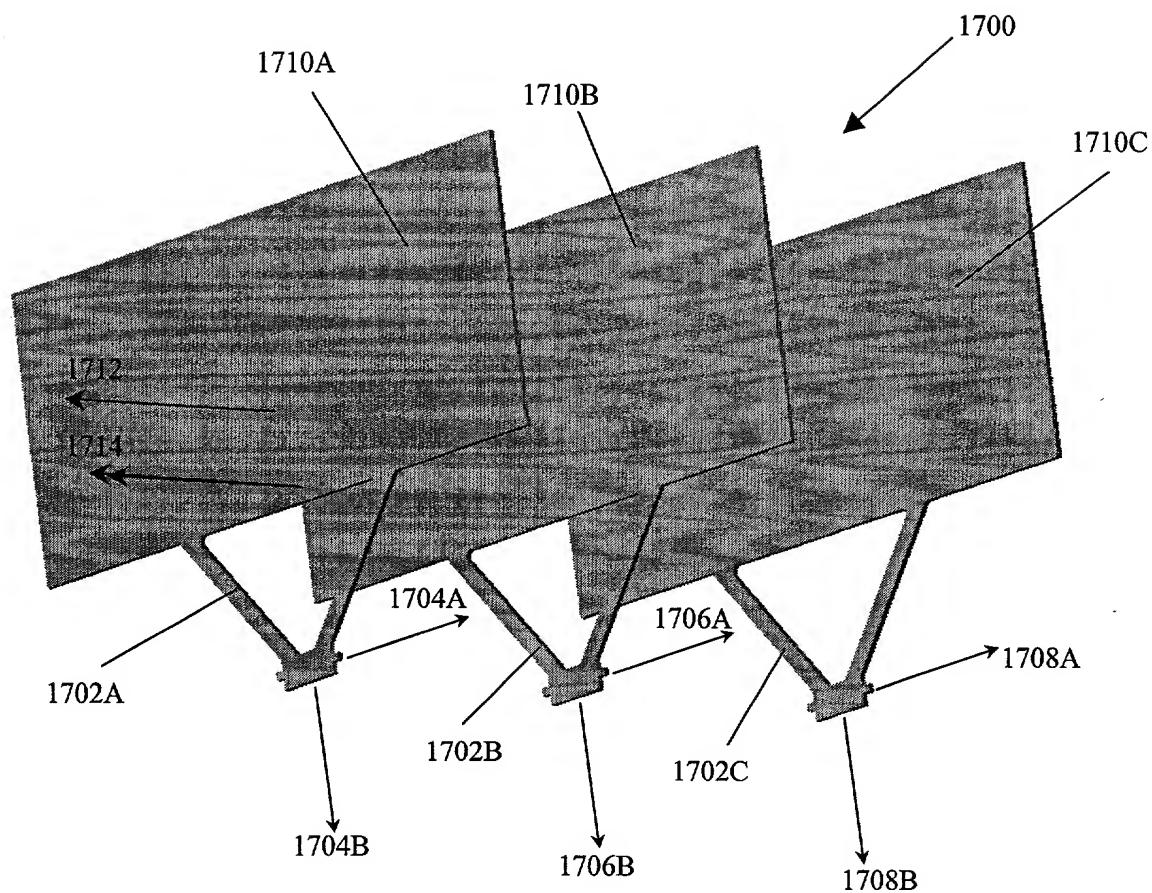


FIGURE 17

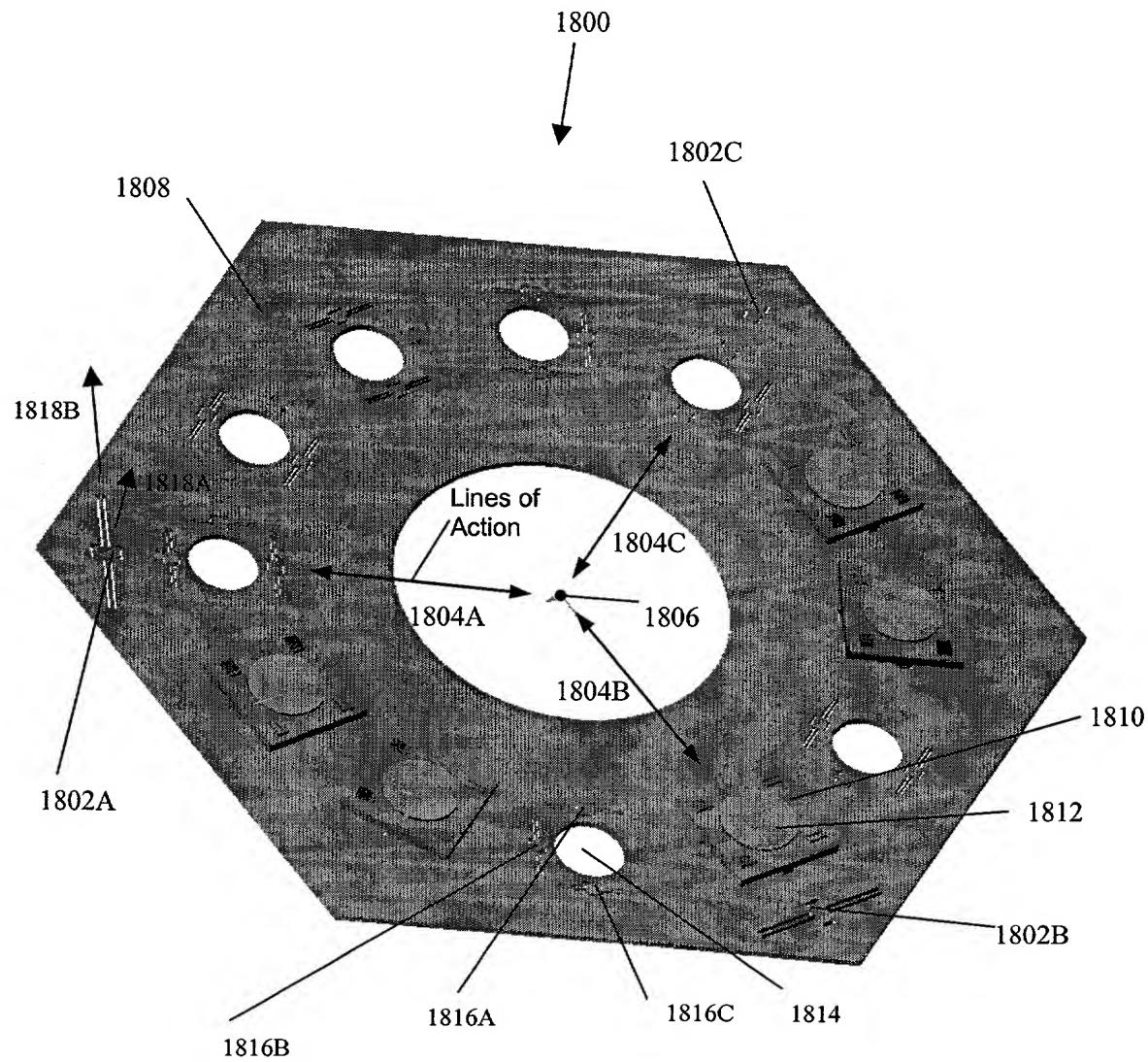


FIGURE 18

Base, Payload, and Connecting Structure and Methods of Making the Same
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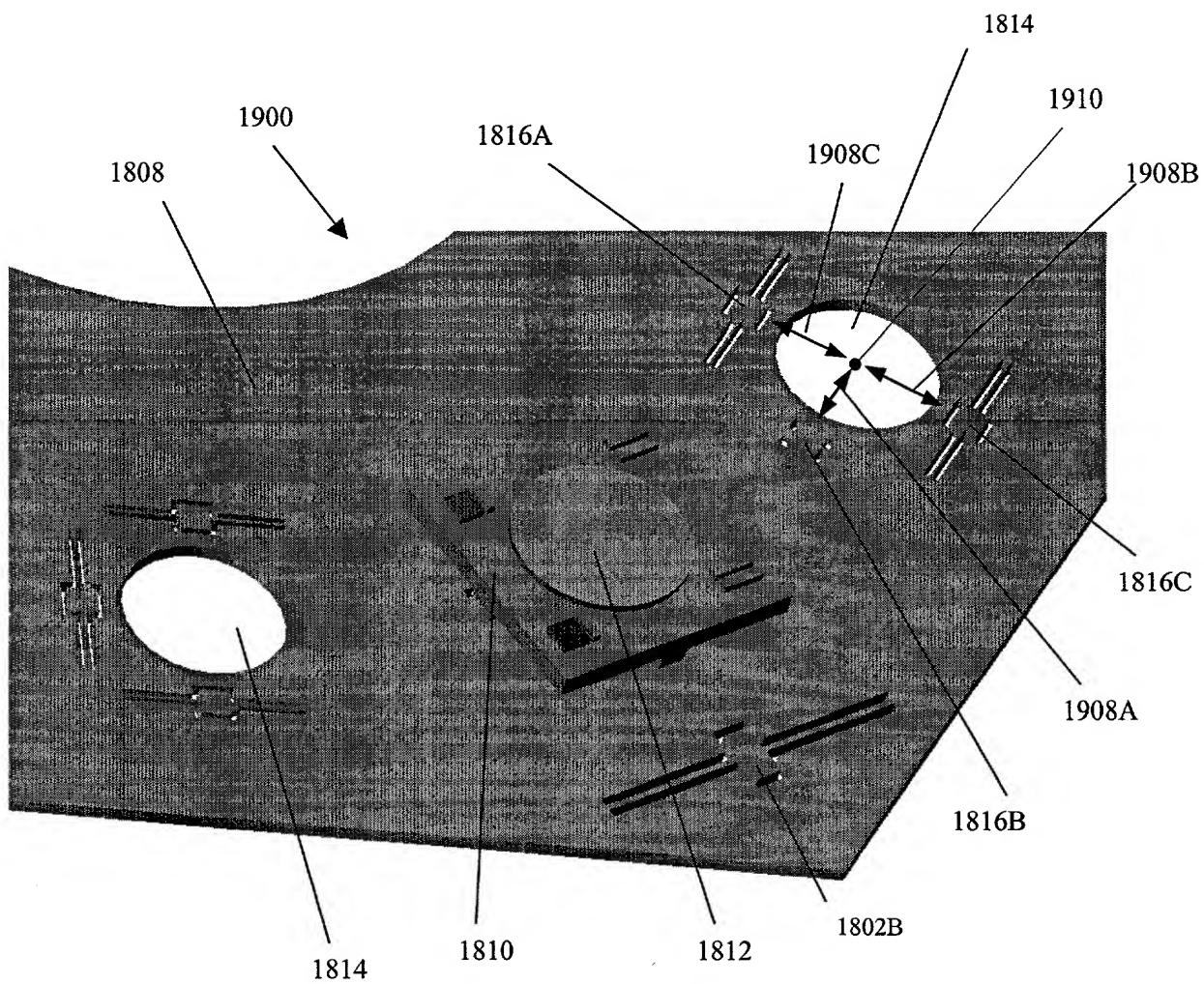


FIGURE 19

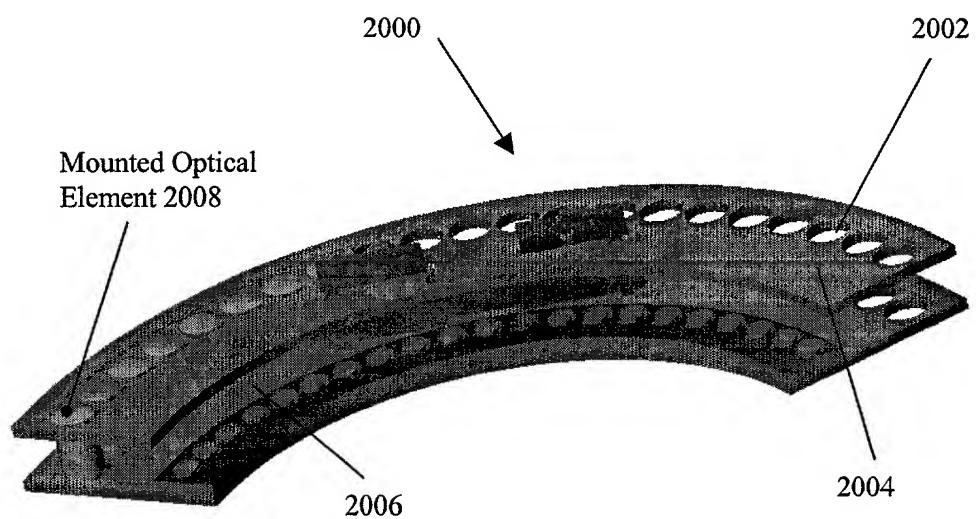


FIGURE 20

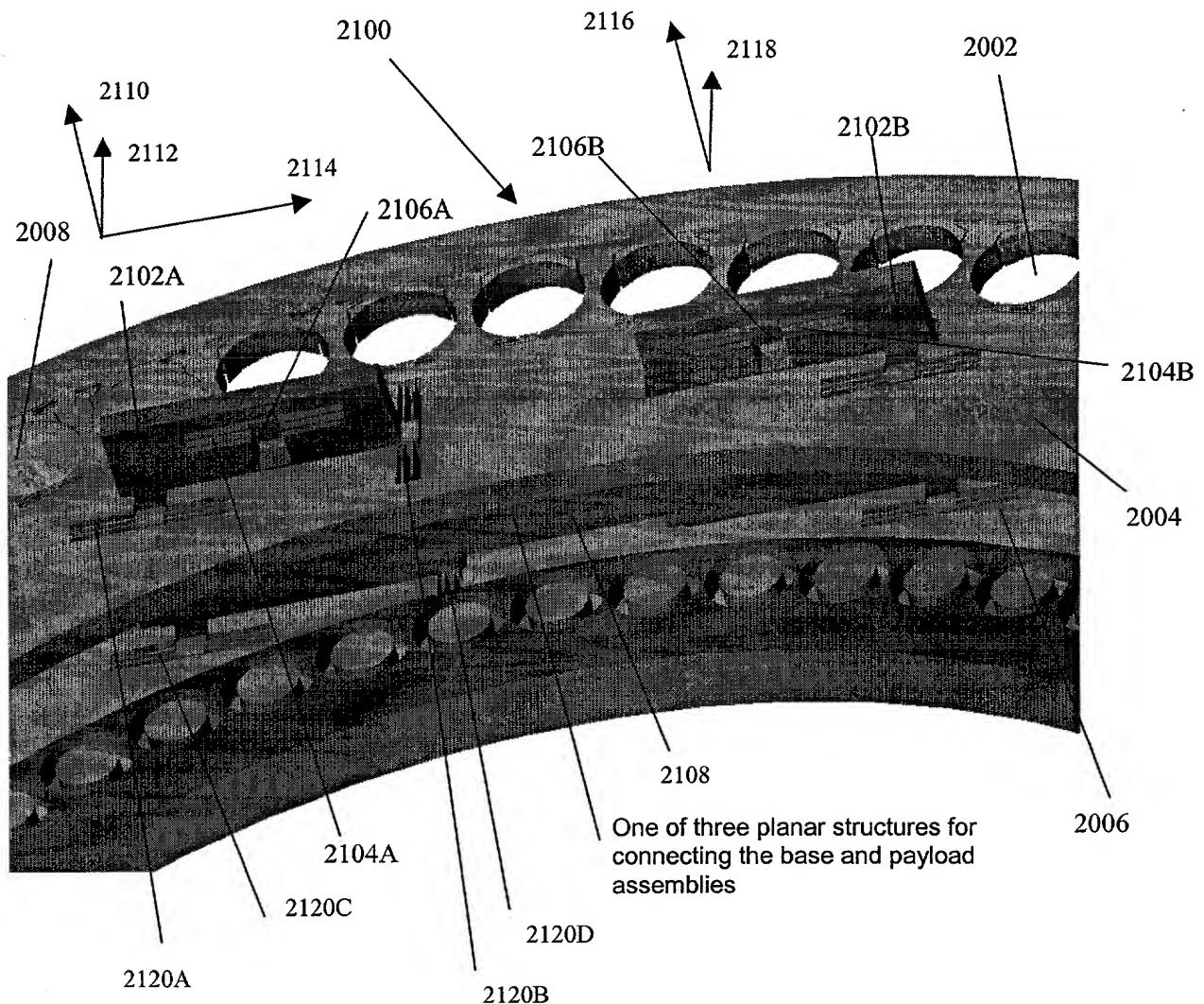


FIGURE 21

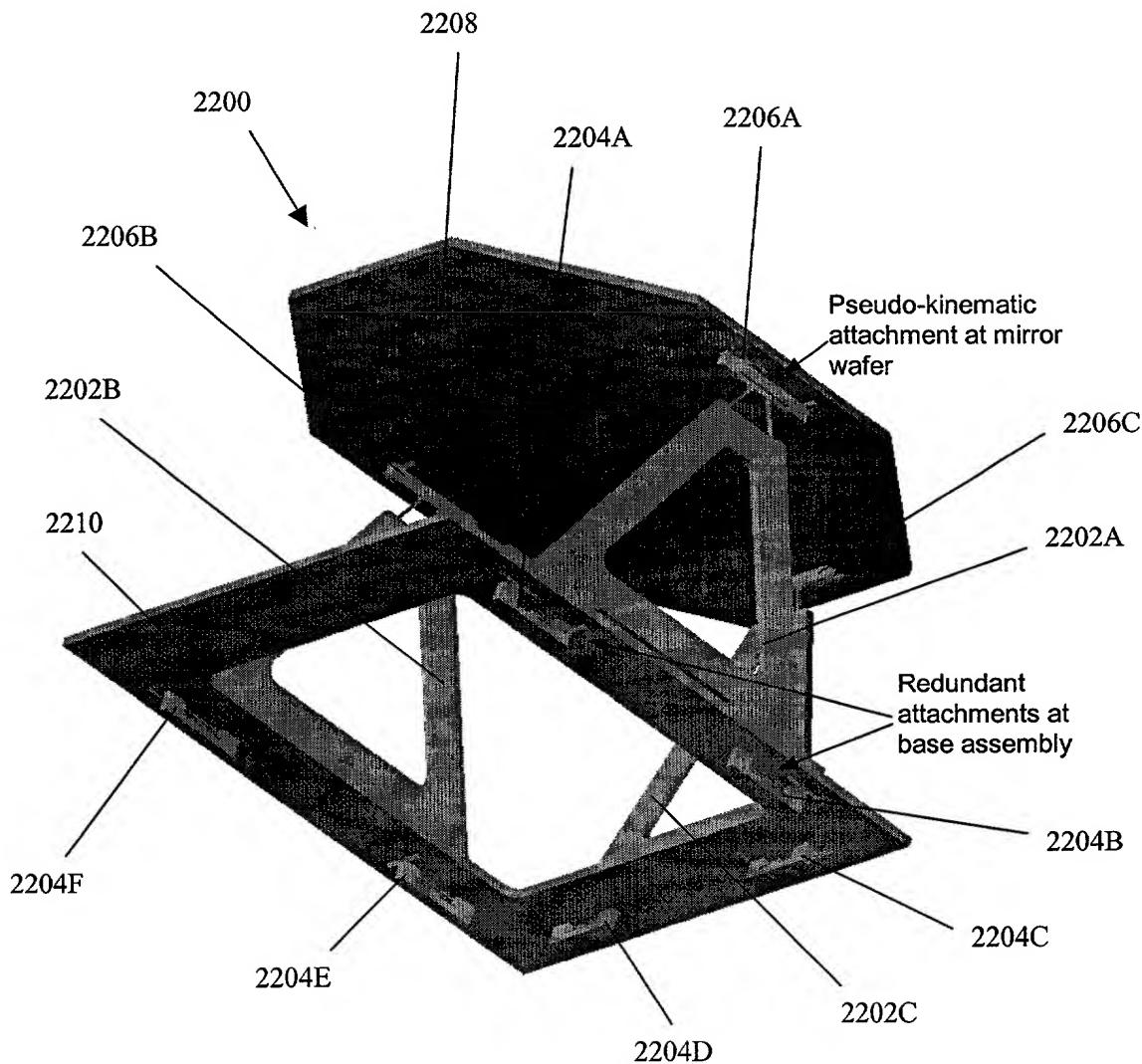


FIGURE 22

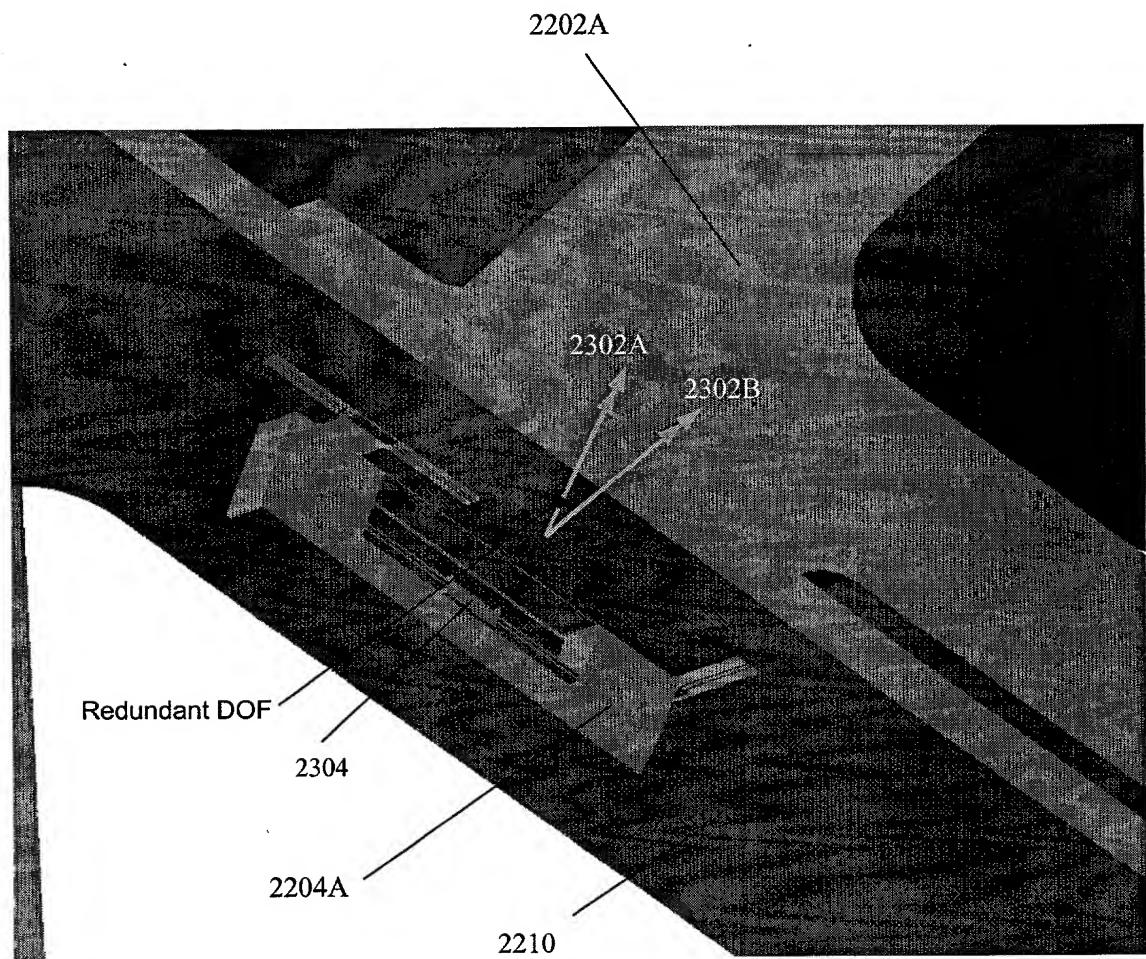


FIGURE 23

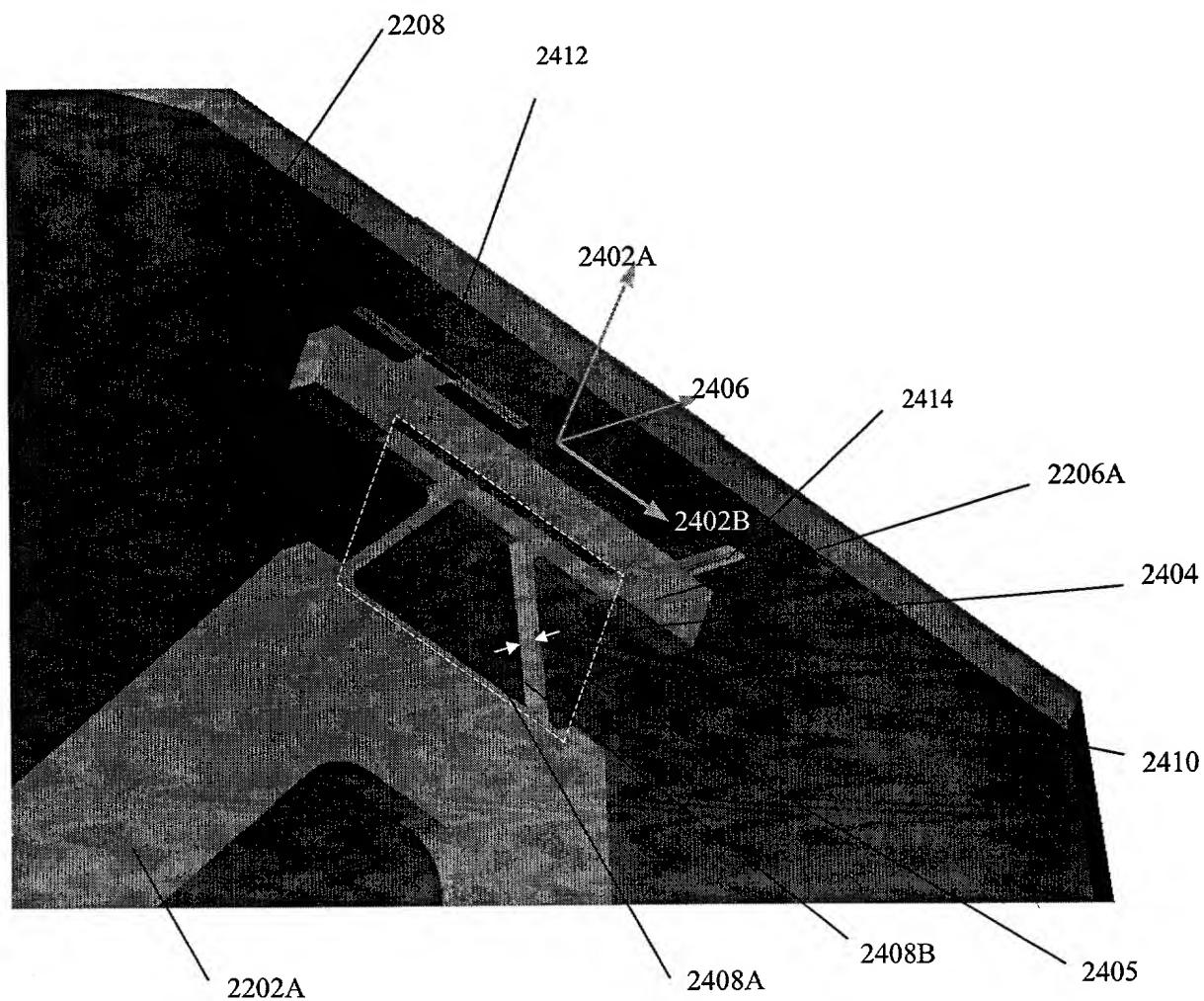


FIGURE 24

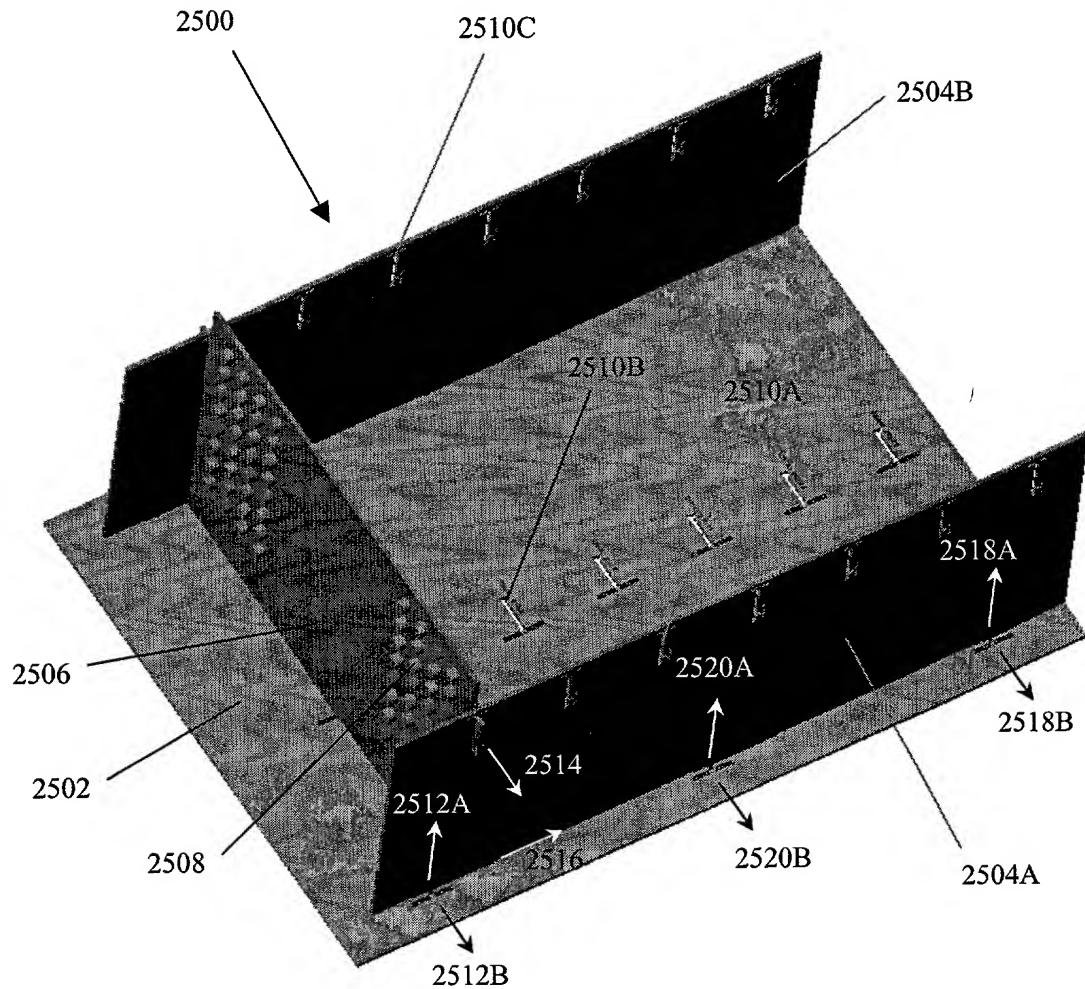


FIGURE 25

Base, Payload, and Connecting Structure and Methods of Making the Same
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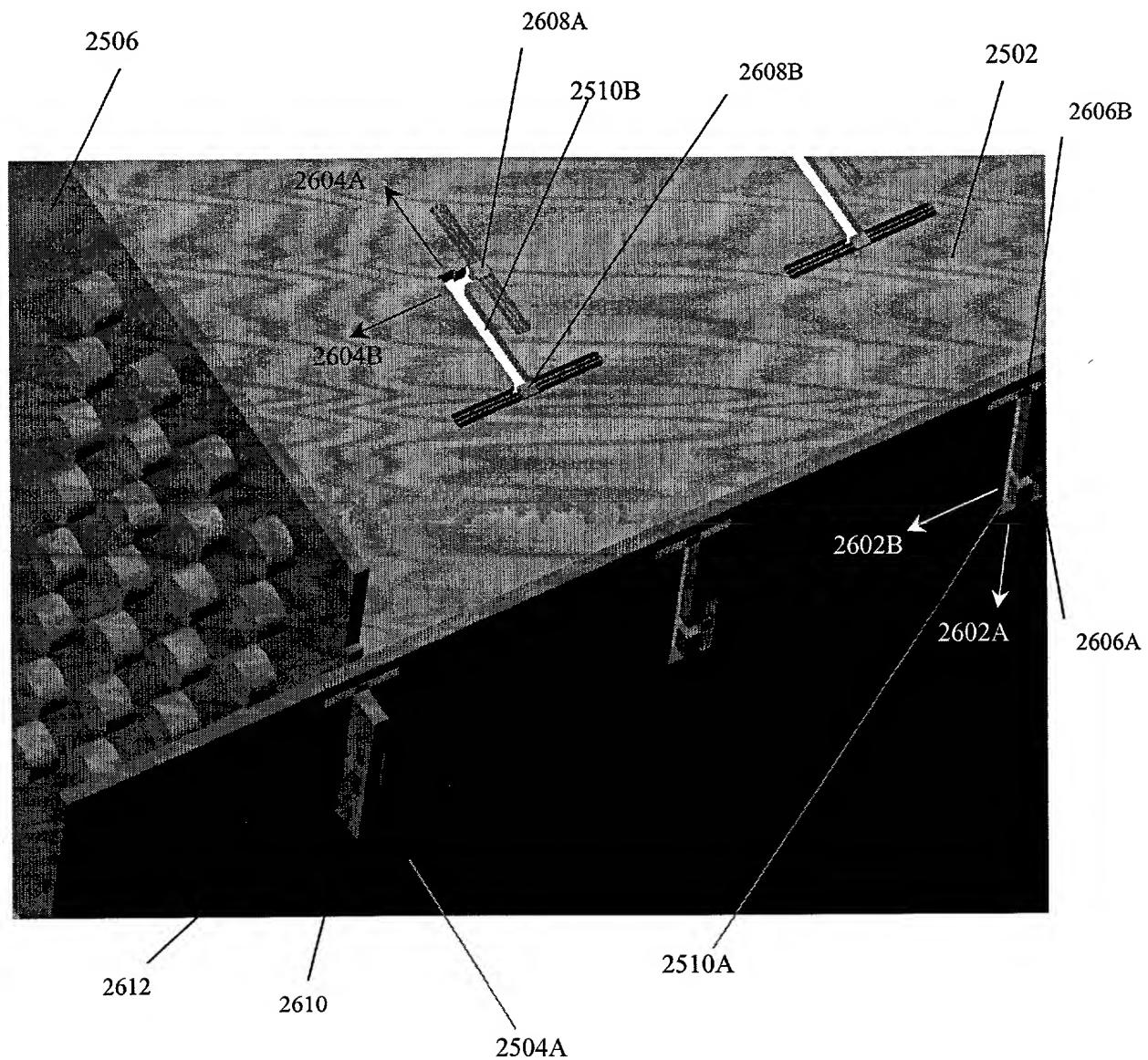


FIGURE 26

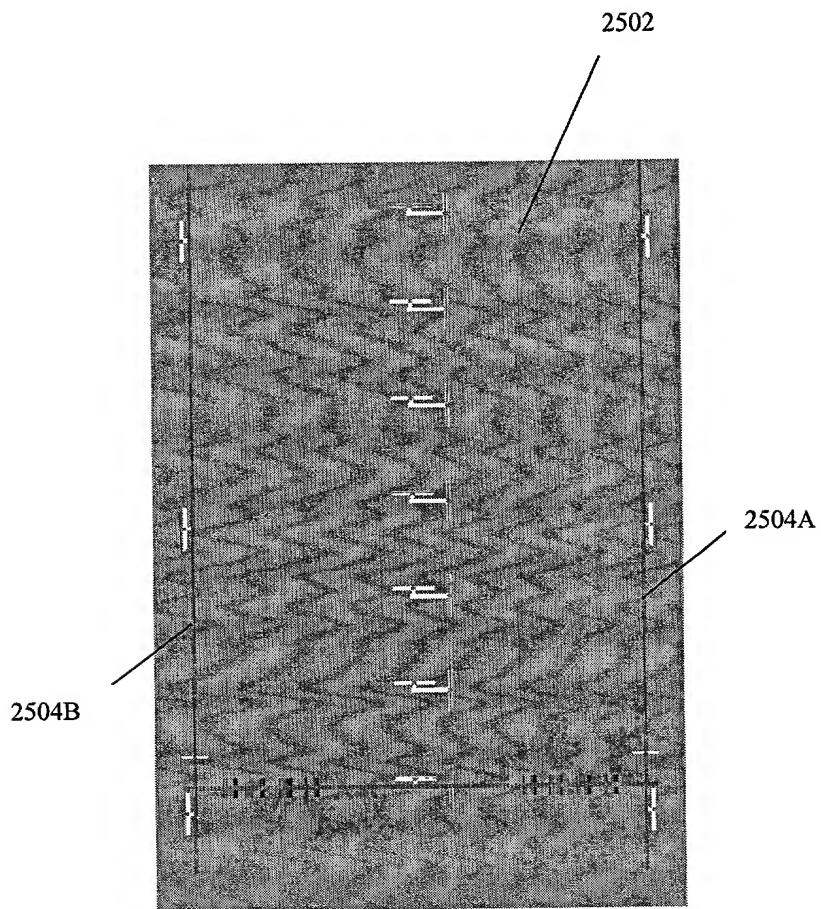


FIGURE 27

KINEMATIC AND NON-KINEMATIC PASSIVE ALIGNMENT ASSEMBLIES AND METHODS OF MAKING THE SAME
CALVET ET AL.
DOCKET NO. M-11692 US

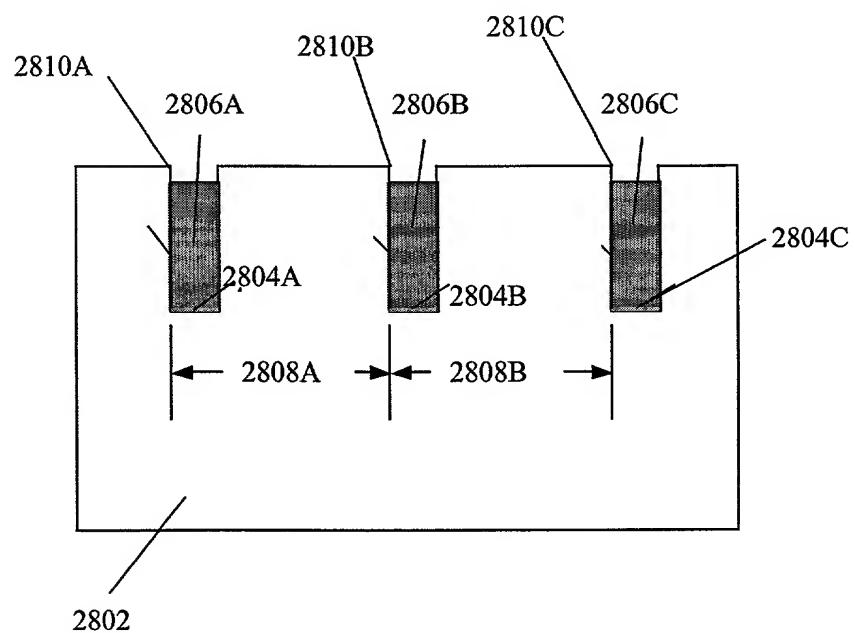


FIGURE 28

KINEMATIC AND NON-KINEMATIC PASSIVE ALIGNMENT ASSEMBLIES AND METHODS OF MAKING THE SAME
CALVET ET AL.
DOCKET NO. M-11692 US

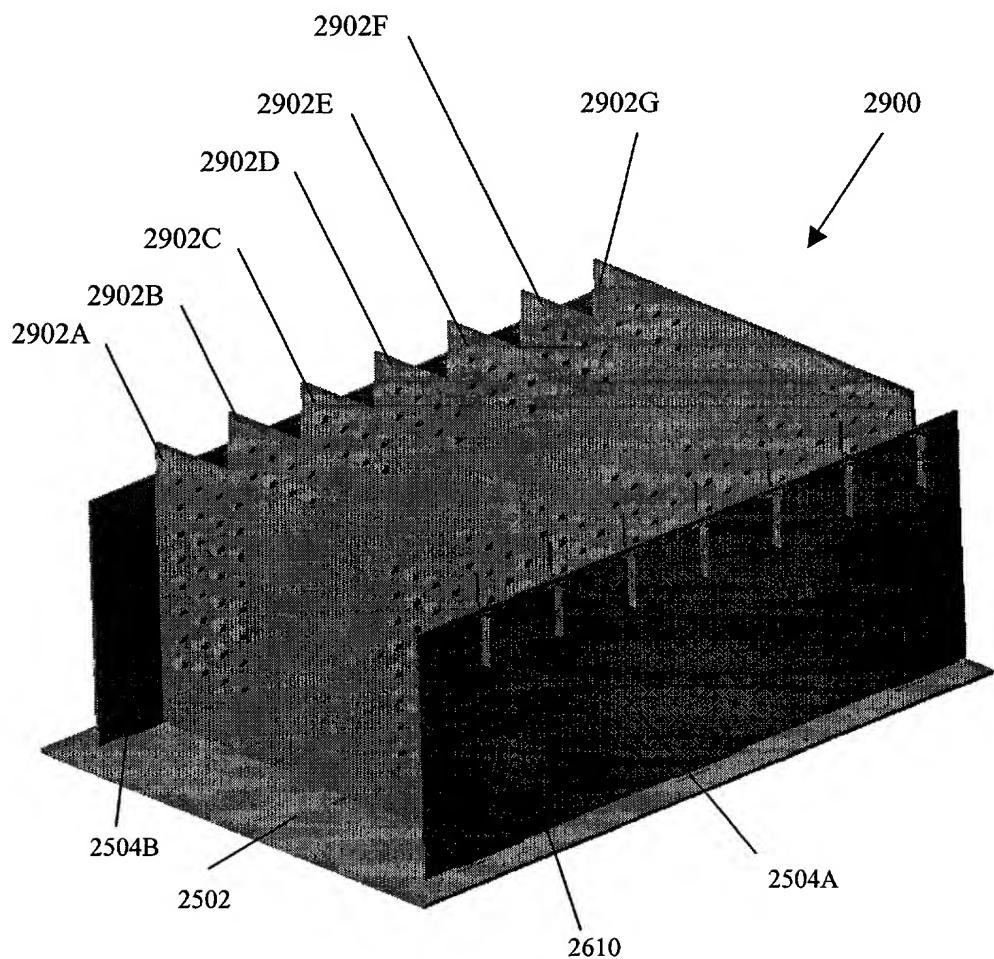


FIGURE 29

KINEMATIC AND NON-KINEMATIC PASSIVE ALIGNMENT ASSEMBLIES AND METHODS OF MAKING THE SAME
CALVET ET AL.
DOCKET NO. M-11692 US

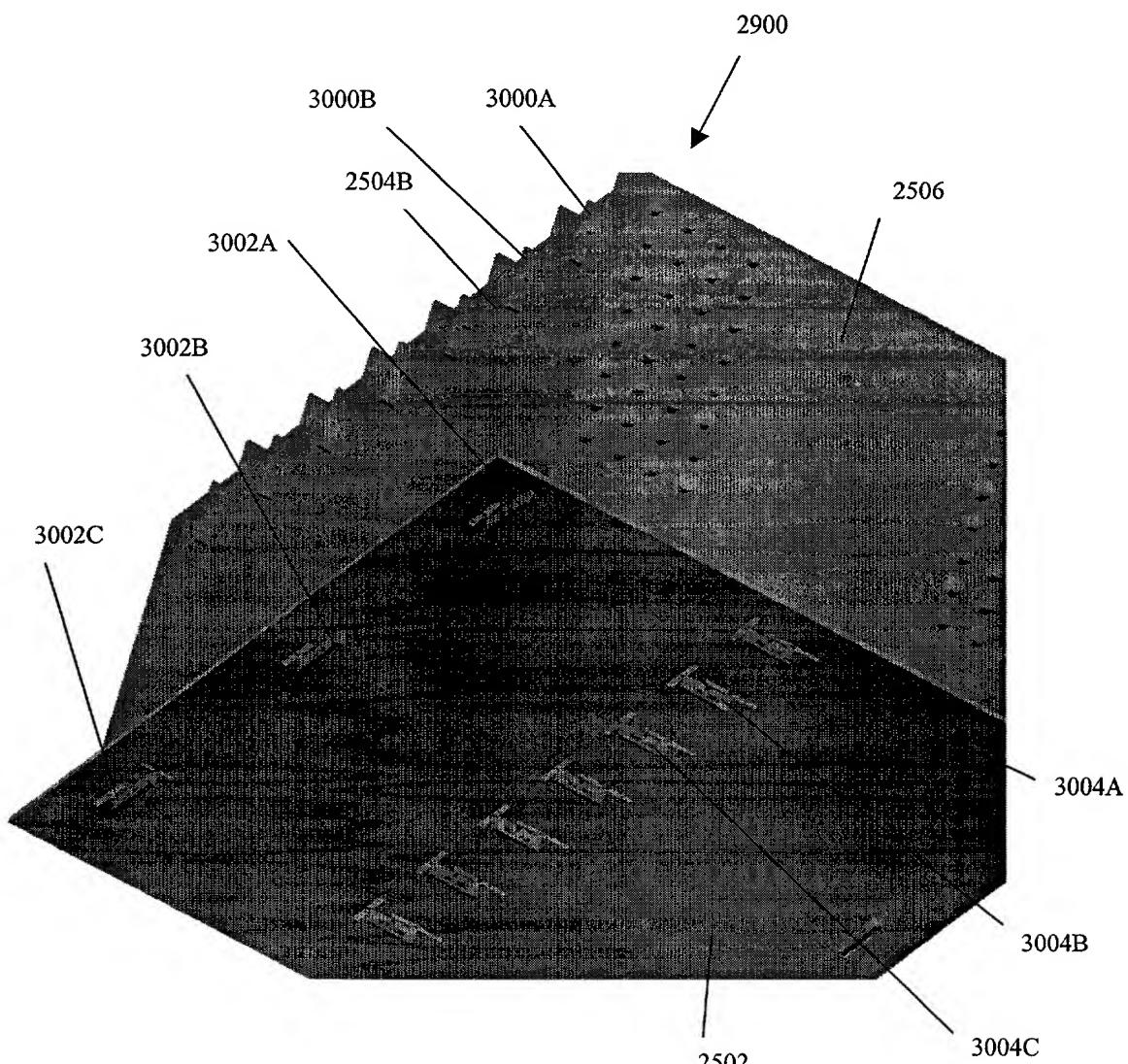


FIGURE 30

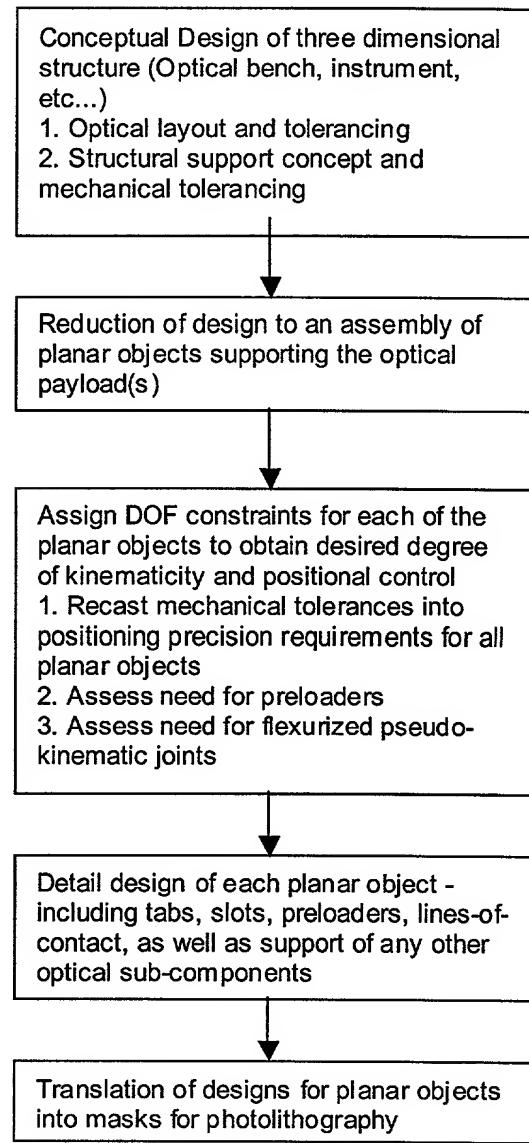


FIGURE 31

The process of making parts for 3D precision structures may be flowcharted as follows:

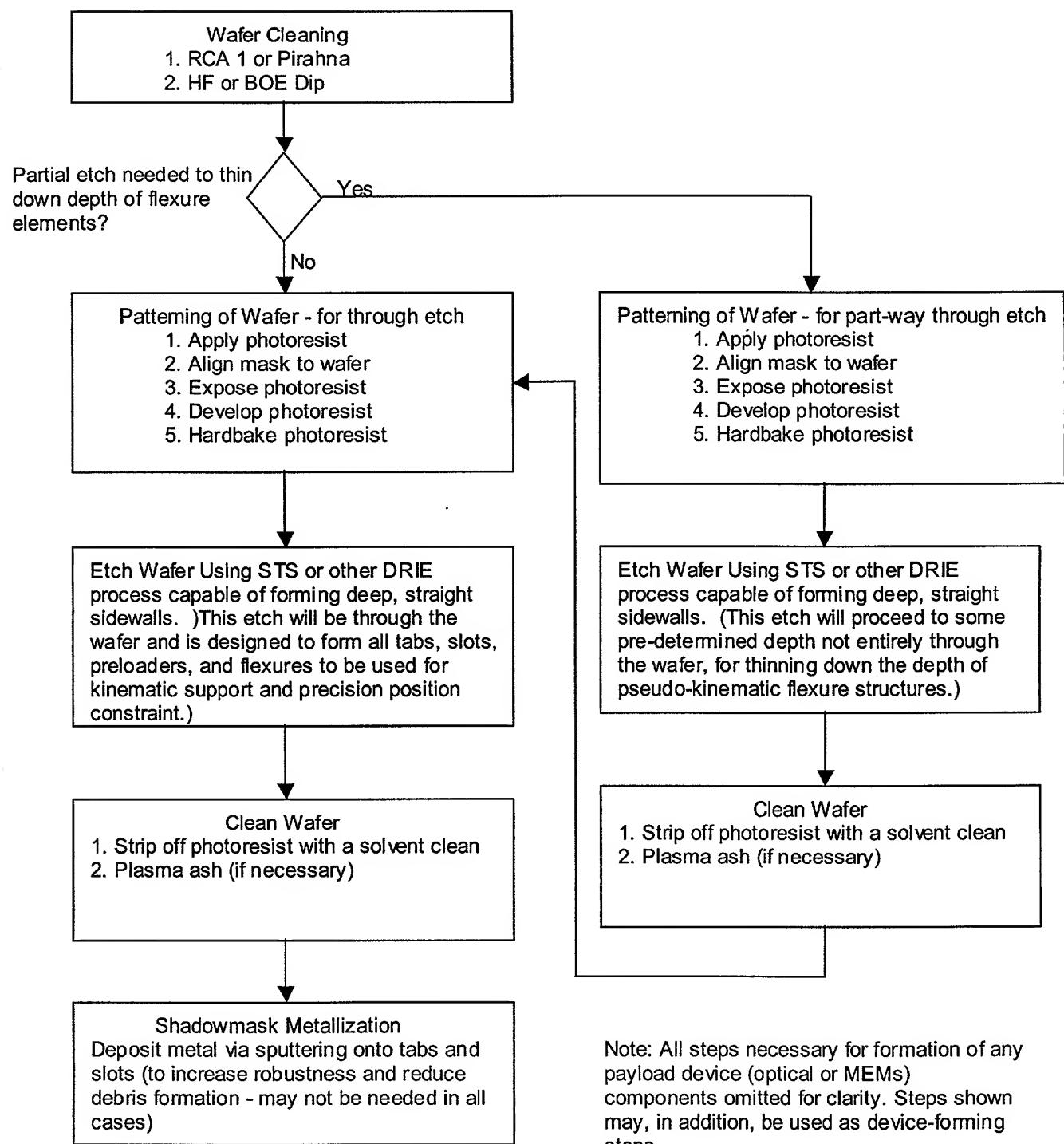
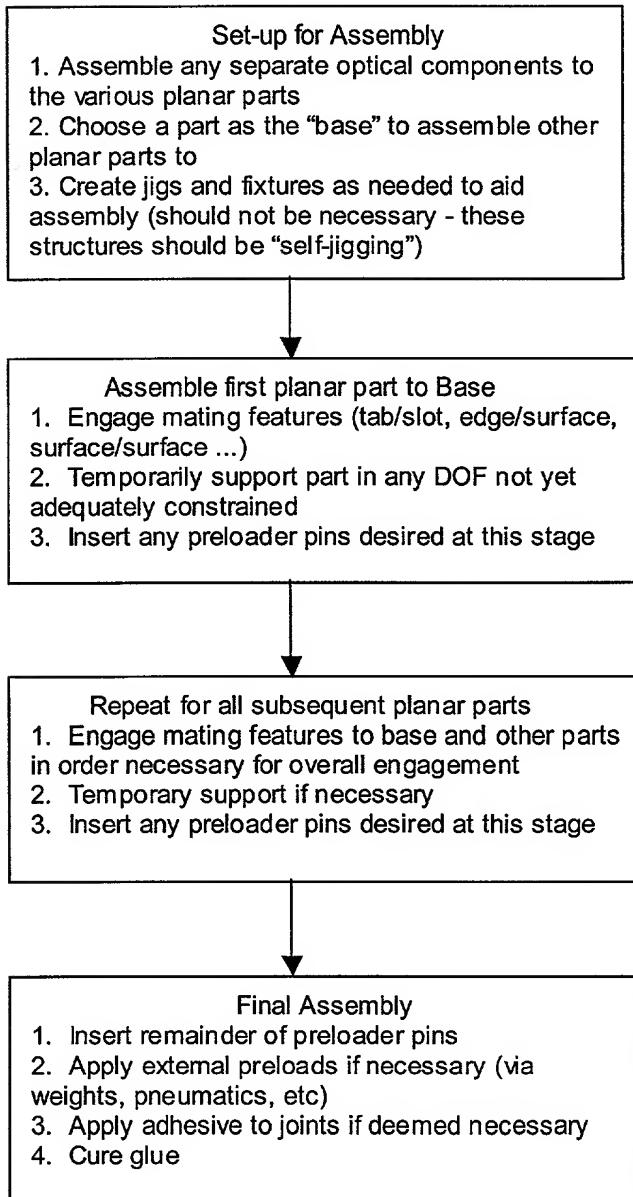


FIGURE 32

The process of assembling 3D structures from planar parts is:



Note: A bottom-to-top topology is assumed here (as in Figure 1: a base, 3 connecting elements (bipods), and a payload). If the topology is more complex (such as a ring), a more complex assembly procedure is required, possibly also requiring jigs/fixtures.

FIGURE 33